

REQUEST FOR RECONSIDERATION UNDER 37 C.F.R. § 1.116
U.S. Application No. 09/881,090
Attorney Docket No. Q64761

I. Preliminary Matters

Applicants would like to thank the Examiner for courtesies extended in the telephonic interview of February 26, 2003, in which the finality of the present Office Action was discussed, as well as the Examiner's interpretation of the applied references and Applicants' claim language.

II. Drawings

Applicants note that the proposed drawing corrections filed on November 26, 2002, have been approved by the Examiner. However, the Examiner has not indicated that the Submission of Corrected Drawings filed on November 26, 2002, also are accepted by the Examiner. Therefore, Applicants request the Examiner to indicate that the Corrected Drawings are accepted in the next Patent Office correspondence.

III. Title of the Invention

The Examiner maintains the objection to the Title of the Invention. Applicants would like to thank the Examiner for providing a suggestion for amending the title. In particular, the Examiner suggests amending the title to recite "An Automotive Alternator Mounting a Brush, Regulator and External Plug Connector", as described in Applicants' Field of the Invention. Accordingly, Applicants have amended the title as suggested by the Examiner, and therefore, request the Examiner to withdraw this objection.

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IV. Finality of the Office Action

The Examiner indicates that Applicants amendment filed on November 26, 2002, necessitated the new grounds of rejection; and therefore, the Examiner makes final the rejections in the present Office Action. As discussed in the interview of February 26, 2003, Applicants respectfully disagree with the Examiner's position and submit that the finality of the present Office Action is premature. As the Examiner requested in the interview, Applicants submit the following remarks for the Examiner's consideration and request the Examiner to withdraw the finality of the present Office Action.

A second or subsequent action on the merits shall be final, except where the Examiner introduces a new ground of rejection that is neither necessitated by Applicant's amendment of the claims nor based on information submitted in an Information Disclosure Statement. See MPEP § 706.07(a). However, a second or any subsequent action on the merits in any application should *not* be made final if it includes a rejection, on prior art not of record, of any claim amended to include limitations which should reasonably have been expected to be claimed. See MPEP § 706.07(b); see also MPEP § 904.

In the present Office Action, Applicants submit that the new ground of rejection was not necessitated by Applicants' amendment of the claims, and therefore, request the Examiner to withdraw the finality of the present Office Action. Additionally, Applicants submit that the amendments to the claims reasonably should have been expected to be claimed. For example, claim 1 was amended in response to the rejections under 35 U.S.C. § 112 and to make editorial changes to the claim to conform with U.S. practice. As such, Applicants changed the term

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“approximately” to the more accepted term “substantially”, which is commonly used in U.S. patent practice and has been held by the Federal Circuit to be definite (see also, e.g., MPEP 2173). Thus, Applicants submit that the Examiner reasonably could have expected these claims to be amended to overcome the indefiniteness rejections.

Furthermore, Applicants submit that whether or not Kashihara is applied to the claim language reciting “approximately” or “substantially” has no affect on the necessity for a new grounds of rejection. The claims must be given the broadest *reasonable* interpretation consistent with the specification. See MPEP § 2111; see also MPEP § 904.01. During examination, the claims must be interpreted as broadly as their terms reasonably allow. This means that the words of the claim must be given their plain meaning unless applicant has provided a clear definition in the specification. See MPEP § 2111.01.

However, in the present Office Action, the Examiner alleges that the amendment of the claims to change “approximately” to “substantially” necessitated the new grounds of rejection. In the interview, the Examiner further explained his position, stating that the original claim language, which recited that “said regulator and said connector are disposed on an *approximately* same plane extending in a radial direction”, could be interpreted broadly to include a regulator and connector disposed on *adjacent planes* extending in a radial direction; whereas the term “substantially” could not be construed to include *adjacent planes*. Applicants respectfully disagree with the Examiner’s interpretation of the claim language for several reasons.

The term “approximately” is defined by Merriam-Webster On-Line Dictionary as “nearly correct or exact”, or by American Heritage On-Line Dictionary as “almost exact or correct”.

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Similarly, the term “substantially” is defined by Merriam-Webster On-Line Dictionary as “being largely but not wholly that which is specified”. On the other hand, the term “adjacent” is defined by Merriam-Webster’s On-line Dictionary as (a) not distant, nearby; (b) having a common endpoint or border; or (c) immediately preceding or following. The term adjacent may or may not imply contact but always implies absence of anything of the same kind in between.

Thus, given the ordinary meaning of these terms, Applicants submit that the term “adjacent” clearly is not synonymous with the term “approximately”, as alleged by the Examiner. This is especially apparent in comparing planes that extend in a radial direction from a common axis, as in the present application. For example, in a case in which a first plane extending in a radial direction is separated by 90° from a second plane extending in a radial direction (i.e., the first plane is at a right angle to the second plane), the first and second planes would be “adjacent” to each other, so long as no other planes intercede these two planes. However, since these two planes are perpendicular to each other, they clearly could not be considered to be “approximately” on the same plane. For at least these reasons, Applicants respectfully submit that the term “approximately” clearly should not have been construed to mean “adjacent”.

Moreover, each of the terms “approximately” and “substantially” are broadening terms; and therefore, both should have been interpreted broadly by the Examiner. As an example, in *Quantum Corp. v. Rodime PLC*, 36 USPQ2d 1162 (Fed. Cir. 1995), the Federal Circuit discussed two cases in which the claims at issue were amended to include words effecting a *broadening* of the claim. In the first case, the term “substantially equal to” was added; whereas in the second

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case, the term “approximately” was added. The Federal Circuit characterized both “substantially equal to” and “approximately” as broadening terms. Thus, Applicants respectfully submit that the terms “approximately” and “substantially” both should have been construed broadly by the Examiner, in a manner consistent with the interpretation of these terms by the Federal Circuit, as well as with the ordinary meaning of these terms.

For at least the foregoing reasons, Applicants respectfully submit that the Examiner improperly construed the claim language to include the term *adjacent*. On the contrary, the Examiner must interpret the claims based on their ordinary meaning and in light of the specification. Accordingly, Applicants submit that the amendment of the claims to change the term “approximately” to “substantially”, if interpreted broadly and in light of the specification, reasonably should not have been construed to necessitate a new grounds of rejection. Therefore, Applicants submit that the finality of the present Office Action is premature, and accordingly, request the Examiner to withdraw the finality of the present Office Action.

V. Rejections based on Prior Art Grounds

The Examiner now rejects claims 1-7 under 35 U.S.C. § 103(a) as being obvious over Kashihara et al. (U.S. Patent No. 6,081,054) in view of Binder (U.S. Patent No. 4,293,788).

In particular, the Examiner concedes that Kashihara does not disclose the centerlines of the brushes, the regulator, and the connector being disposed on “substantially” the same plane extending in a radial direction, as recited in claim 1. However, the Examiner alleges that Binder makes up for the deficiencies of Kashihara. To this end, the Examiner asserts that it would have

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been obvious to modify the alternator of Kashihara based on the disclosure of Binder to arrive at all of the limitations of the claimed invention. For at least the following reasons, Applicants respectfully disagree with the Examiner's position.

Applicants submit that the test for obviousness merely is not whether the individual elements can be found in a series of references. Instead, it is settled law that, to establish a *prima facie* case of obviousness, the Examiner must also provide a suggestion or motivation, either in the references themselves or the prior art in general, for combining the individual features disclosed in the references to arrive at the claimed invention in as complete detail as is recited in the claims.

For example, even if a prior art device is capable of being modified to run the way the apparatus is claimed, it is incumbent on the Examiner to provide a suggestion or motivation in the reference to modify the reference in this way. See MPEP § 2143.01. Furthermore, in determining whether a suggestion or motivation exists, the references as a whole must be considered, including parts of the references that would lead away from the claimed invention. See MPEP § 2141.03. Moreover, if the proposed modification or combination of the prior art would change the principle of operation of the prior art invention being modified, then the teachings of the references are not sufficient to render the claims *prima facie* obvious. See *In re Rattis*, 270 F.2d 810, 123 USPQ 349 (CCPA 1959); see also MPEP § 2143.01. And finally, assuming the references can be combined in the manner alleged by the Examiner, the combination of references must result in the claimed invention in as complete detail as is recited in the claims.

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In the present Office Action, the Examiner asserts that it would have been obvious to modify the alternator of Kashihara based on the disclosure of Binder to arrive at the claimed invention, *for the purpose of providing effective cooling*. However, as set forth above, the Examiner must consider each reference as a whole for what it discloses to a person of skill in the art. That is, the Examiner simply cannot pick individual elements from the secondary reference and combine them with the primary reference, without a reasonable motivation or suggestion for combining these individual features.

In present rejection, the principle of operation of cooling the voltage regulator in Kashihara clearly is different than the principle of operation of cooling the voltage regulator in Binder. Therefore, Applicants submit that it would not have been obvious to combine the teachings of Kashihara and Binder.

For example, Kashihara discloses that the centrifugal fans 5 rotate so that the cooling air is sucked from the intake openings 1a, 2a in a front bracket 1 and a rear bracket 2 and discharged to the outside through exhaust openings 1b, 2b.

On the other hand, Binder discloses that the cooling of alternators, such as the alternator disclosed in Kashihara, suffers from a problem in which the circulating air is already hot. In particular, Binder discloses that the cooling air enters these conventional alternators through openings, typically in slit form, formed in the end bells of the structure, passes the voltage regulator, and is then, inwardly of the end bell, directed to cool the bearings, the rotor, and the slip rings and brush region of the structure (see col. 1, lines 20-25). To overcome this problem, Binder discloses an alternator that intakes air in an essentially radial direction through the duct

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element 15. As shown in Figure 1, Binder discloses locating the duct element 15 at the interior of the generator housing at a location where it is exposed to an intensive concentrated stream of cooling air (see col. 2, lines 12-15).

Accordingly, Applicants submit that Kashihara and Binder clearly operate differently. In fact, Binder specifically teaches away from forming intake holes in the end bells of the structure of the alternator. Thus, Applicants submit that it would not have been obvious to combine Kashihara with the contrary teachings of Binder to arrive at the claimed invention recited in claim 1.

As another example, Kashihara discloses that the connecting terminals 23a of the connector portion 23 are arranged so that the connector portion 23 does not need to be formed in the rear bracket 2. However, contrary to Kashihara, Binder discloses that the plug-socket connection and the corresponding opening 27 for receiving a standard automotive plug is formed in the rear bracket (i.e., the carrier plate 19, which is installed in the end ball 2)(see Fig. 2; see also col. 4, lines 12-15). Thus, Applicants submit that the teachings of Kashihara are contrary to the teachings of Binder; and therefore, it would not have been obvious to combine Kashihara and Binder to arrive at the claimed invention recited in claim 1.

For at least the foregoing reasons, Applicants submit that the Examiner has not established a *prima facie* case of obviousness for combining Kashihara and Binder, or more particularly, for combining the individual elements of these references, to arrive at the claimed invention recited in claim 1.

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However, assuming *arguendo* that a motivation for combining Kashihara and Binder exists, Applicants submit that the resulting combination of references would not disclose or suggest all of the recitations of independent claim 1. For example, claim 1 recites, *inter alia*:

“said case containing a plurality of intake holes at a side where said fan of said rotor is mounted, and cooling air drawn in from said intake holes is bent in a centrifugal direction after cooling said rectifier to ventilate and cool said coil ends;” ...

“and said plurality of intake holes are formed in said case at a position corresponding to said rectifier.”

In comparison, Applicants submit that the combination of Kashihara and Binder would result (at best) in an alternator that intakes air in an essentially radial direction through the duct element located at the interior of the generator housing, not at the end of the housing where the fan is mounted, as recited in the claimed invention.

Moreover, the Examiner has not provided any motivation or suggestion for selectively combining only certain elements of Binder with the device of Kashihara. On the contrary, as set forth above, the teachings of Kashihara and Binder must be considered on the whole. Thus, Applicants submit that the resulting combination of Kashihara and Binder clearly would not disclose or suggest the claimed combination of elements recited in independent claim 1. Accordingly, Applicants request the Examiner to withdraw the rejection of independent claim 1.

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Additionally, Applicants submit that claims 2-7 are patentable over any combination of Kashihara and Binder at least by virtue of their dependency from independent claim 1. Furthermore, Applicants submit that claims 2-7 are separately and independently patentable over any combination of Kashihara and Binder at least by virtue of the additional recitations recited therein. Moreover, since the examiner has not even applied the cited references to the additional limitations recited in claims 2-7, Applicants submit that the Examiner also has not established a *prima facie* case of obviousness with respect to these claims.

For example, dependent claim 3 recites, *inter alia*, "said connector is disposed at substantially an outer circumferential-side of said regulator and said brush, and center lines of said connector, said regulator and said brush are disposed on substantially said same plane extending in a radial direction." In comparison, neither Kashihara nor Binder discloses or suggest at least a connector that is disposed on an outer circumferential-side of the regulator and the brush, as recited in claim 3. For example, Kashihara discloses that the connector 23 is disposed within the same circumferential diameter 30c as the brushes and the regulator 18, as shown in Figure 4. Similarly, the connector disclosed by Binder also is within the same circumferential diameter as the brushes and the regulator, as shown in Figure 1. Therefore, the combination of Kashihara and Binder clearly does not (and cannot) disclose or suggest all of the recitations of at least dependent claim 3.

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VI. Conclusion

In view of the above, reconsideration and allowance of this application are now believed to be in order, and such actions are hereby solicited. If any points remain in issue which the Examiner feels may be best resolved through a personal or telephone interview, the Examiner is kindly requested to contact the undersigned attorney at the telephone number listed below.

The USPTO is directed and authorized to charge all required fees, except for the Issue Fee and the Publication Fee, to Deposit Account No. 19-4880. Please also credit any overpayments to said Deposit Account.

Respectfully submitted,


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